

# ABSTRACT

A Terrestrial Satellite Interworking Unit (TSIU) is provided for achieving seamless integration of a terrestrial ATM network with a satellite ATM network.

5 In particular, the TSIU is incorporated within a gateway for interconnecting a COTS ATM switch communicably linked to the terrestrial ATM network and a satellite modem communicably linked to the satellite ATM network. The TSIU provides traffic and resource management functions (such as DAMA, congestion control, and jitter removal), signaling interworking functions, and satellite domain-specific functions (such as data encryption/decryption, control channel ciphering, and gateway authentication).

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